TECHNICAL HANDBOOK
FOR THE
OFFICE OF ENVIRONMENTAL HEALTH AND ENGINEERING

VOLUME III - HEALTH CARE FACILITIES DESIGN AND CONSTRUCTION

Chapter 21-8

METRICATION

21-8.1 INTRODUCTION

A. PURPOSE - This chapter provides guidelines and procedures for implementing the metric system in Indian Health Service (IHS) health care facilities and quarters projects.

B. BACKGROUND - Public Law 100-418 designates metric as the preferred system of weights and measures for U.S. trade and commerce. Under this law, all federal procurements, grants, and other business-related activities must use metric units by September 1992.

In July 1991, Presidential Executive Order 12770 designated the Secretary of Commerce to direct and coordinate metric conversion efforts by federal departments and agencies, and to authorize longer time frames for metric conversion in industries where September 1992 was impractical. The revised deadline for federal design and construction projects was January 1994.

In April 1993, the Department of Health and Human Services (HHS) issued an updated Chapter 8-25, HHS Metric Program, of the General Administration Manual dated April 22, 1993.

C. DEFINITIONS

(1) Metric System of Measurement - The International System of Units, Le Systeme International d'Unites (SI), as established by the General Conference on Weights and Measures in 1960.

(2) Metrication - Any act that increases metric system use, including metric training, initiating or converting measurements into metric, etc.

(3) Hard Metric - The use of rounded and rationalized metric measurements, which are convenient when working with specifications, standards, supplies, and services. The physical dimensions of materials are changed to reflect rounded and rational numbers in metric.

(4) Soft Metric - The mathematical conversion of an inch-pound measurement to its metric equivalent in specifications, standards, supplies, and services. Material size remains unchanged, except that it is expressed in metric units.

(5) Inch-Pound Units - Units based on U.S. inch and pound standards, as defined by the National Institute of Standards and Technology.

21-8.2 GUIDELINES

A. IMPLEMENTATION - Effective October 1, 1993, all IHS health care facilities planning, design, construction, and leasing activities shall be accomplished using metric system (SI), including all maintenance and improvement projects, all "federally-assisted" construction projects, and quarters projects. Metric measurements

must be used exclusively; no dual measurements will be accepted. The basic modules will be standard, logical, rounded, and rational metric units. No mathematical conversions (soft metric) will be allowed. Where accepted metric modules are not available, professional judgement shall be exercised when converting and rounding from inch-pound units. Inch-pound units shall not appear in reports, drawings, specifications, or submissions of any documents.

Metric guidelines used on IHS health care facilities projects shall conform to:

(1) The U.S. General Services Administration (GSA), Metric Design Guide(M2), October 1993, and Metric Design Guide,(PBS-PQ260), May 1994;

(2) The Construction Subcommittee of the Metrication Operating Committee, Interagency Council on Metric Policy, Metric Guide For Federal Construction, latest edition; and

(3) The U.S. Department of Commerce, Metric Style Guide For The News Media, latest edition.

B. RESPONSIBILITIES

The Area offices and Engineering Services should contact the Office of Environmental Health and Engineering (OEHE), Division of Facilities Planning and Construction (DFPC), with metric system concerns and questions. The DFPC is responsible for:

(1) Developing metric guidelines for specific programs;

(2) Assisting the Engineering Services and Area offices by providing metric information and training materials to increase staff awareness and understanding of the metric system; and

(3) Providing metric training for IHS staff working in facilities planning, design, construction, and leasing activities.

The Engineering Services and Area offices should:

(1) Use metric in all IHS health care facilities guidance documents, reports, policies, program announcements, regulations, etc., as they are revised or new issuances are generated;

(2) Ensure that all activities related to health care facilities use the metric system.

C. REPORTING REQUIREMENTS - The Engineering Services and Area offices shall submit to the Acting Associate Director, Office of Environmental Health and Engineering, for transmittal to the Director, Office of Administration and Management, by December 1 each year, a report which includes:

(1) Significant metric accomplishments;

(2) Significant problems encountered in metric conversion;

(3) Any recommendations regarding the metric activities including actions planned for the current and future fiscal years to further implement the metric system; and

(4) Othe information (e.g., information pertaining to metric conversion costs including onsite and office training, etc.)

21-8.3 EXCEPTIONS

Exceptions to the usage of metric system require the approval of the Director, Indian Health Service.